

WHAT IS CLAIMED IS:

1. An optical disc drive adapted to read information from an optical disc by emitting a laser beam from a selected one of a plurality of light sources disposed apart from each other radially of the optical disc and focusing the laser beam on the optical disc, detecting a return light resulted from reflection of the laser beam at the optical disc and processing the result of return light detection, the optical disc drive comprising:

a common optical system for irradiating the laser beam emitted from the selected one of the plurality of light sources to the optical disc; and

a moving means operative in response to an laser beam output from the selected light source to move all or a part of the optical system radially of the optical disc.

2. The optical disc drive as set forth in Claim 1, wherein:

the optical system comprises an objective lens to focus the laser beam on an information recording surface of the optical disc;

the moving means is a tracking controlling means for controlling the tracking by moving the objective lens radially of the optical disc; and

the objective lens is moved radially of the optical disc in response to the laser beam output from the selected light source.

3. The optical disc drive as set forth in Claim 1, wherein the plurality of light sources and the photodetector for the return light are formed integrally with each

other.

4. The optical disc drive as set forth in Claim 1, wherein:

the plurality of light sources includes a first light source to emit a laser beam of a first wavelength and a second light source to emit a laser beam of a second wavelength; and

the moving means moves all or a part of the optical system in such a manner that when the laser beam is emitted from the first light source, the optical axis of the optical system coincides with the optical path of the first-wavelength laser beam and that when the laser beam is emitted from the second light source, the optical axis of the optical system coincides with the optical path of the second-wavelength laser beam.

5. The optical disc drive as set forth in Claim 4, wherein the first and second light sources are disposed in proximity to each other.

6. The optical disc drive as set forth in Claim 1, wherein the optical system is moved away from the light source selected to emit a laser beam.

7. The optical disc drive as set forth in Claim 4, further comprising an astigmatism correcting means for common use with the laser beams emitted from the first and second light sources.

8. An optical pickup adapted to irradiate a laser beam to an optical recording medium, detect a return light from the optical recording medium and providing a result of return light detection, the optical pickup comprising:

first and second light sources to emit the laser beams of different wavelengths, respectively;

a photodetector to detect the return light from the optical recording medium; and

an optical system to converge the laser beam emitted from a selected one of the first and second light sources and guide the return light from the optical recording medium to the photodetector;

the first and second light sources being disposed so that the directions of the deformation, caused by the astigmatism, of the sectional shape of the laser beams emitted from the light sources will nearly coincide with each other; and

the optical system being adapted for common use with the laser beams emitted from the first and second light sources, and including an astigmatism correcting means for common use with the laser beams emitted from the first and second light sources.

9. The optical pickup as set forth in Claim 8, wherein the astigmatism correcting means is a transparent parallel flat plate.

10. The optical pickup as set forth in Claim 8, wherein the first and second light sources are nearly equal in astigmatism to each other.

11. The optical pickup as set forth in Claim 8, wherein the first and second light sources and the photodetector are provided integrally in one package.

12. The optical pickup as set forth in Claim 8, wherein the laser beams from the

first and second light sources are different in wavelength from each other.

13. An optical disc drive adapted to read information from an optical disc by emitting a laser beam from a selected one of a plurality of light sources disposed apart from each other radially of the optical disc and focusing the laser beam on the optical disc, detecting a return light resulted from reflection of the laser beam at the optical disc and processing the result of return light detection, the optical disc drive including:

first and second light sources to emit the laser beams of different wavelengths, respectively;

a photodetector to detect the return light from the optical recording medium; and

an optical system to converge the laser beam emitted from a selected one of the first and second light sources and guide the return light from the optical recording medium to the photodetector;

the first and second light sources being disposed so that the directions of the deformation, caused by the astigmatism, of the sectional shape of the laser beams emitted from the light sources will nearly coincide with each other; and

the optical system being adapted for common use with the laser beams emitted from the first and second light sources, and including an astigmatism correcting means for common use with the laser beams emitted from the first and second light sources.

14. The optical disc drive as set forth in Claim 13, wherein the astigmatism correcting means is a transparent parallel flat plate.
15. The optical disc drive as set forth in Claim 13, wherein the first and second light sources are nearly equal in astigmatism to each other.
16. The optical disc drive as set forth in Claim 13, wherein the first and second light sources and the photodetector are provided integrally in one package.
17. The optical disc drive as set forth in Claim 13, wherein the photodetector has the light-incident surface thereof divided in a first direction corresponding to the scanning direction of the laser beam and in a second direction perpendicular to the first direction and thus provides results of light detection from these light-incident surface divisions.
18. The optical disc drive as set forth in Claim 13, wherein the first and second light sources have the deflection surfaces thereof set parallel to the scanning direction of the laser beam or perpendicular to the scanning direction.
19. The optical disc drive as set forth in Claim 13, wherein the laser beams from the first and second light sources are different in wavelength from each other.